Remarks

Interview Summary

Applicant's representative thanks Examiner Sisson for his courtesy in scheduling a telephonic interview dated May 11, 2004. Applicant's representative generally agrees with the substance of the Interview Summary mailed on May 13, 2004, with one exception. Applicant's representative does not recall saying and respectfully demurs that "certain wording could possibly cause such confusion" with respect to the amplification of the entire chromosome 6. Applicant's representative recalls specifically stating that the HLA loci were known to be located on the short arm of chromosome 6 and that the statement in the Office Action of March 31, 2004, that "claims 1, 13, and 19 have been interpreted as encompassing the amplification of entire chromosome 6" was not a reasonable interpretation.

With respect to the nature of the HLA loci, that is disclosed in the Specification at pg. 2, lines 22-33, which recites,

> The major histocompatibility complex is a cluster of genes that occupy a region on the short arm of chromosome 6. This complex, denoted the human leukocyte antigen (HLA) complex, includes at least 50 loci. For the purposes of HLA tissue typing, two main classes of loci are recognized. The Class I loci encode transplantation antigens and are designated A, B and C. The Class II loci (DRA, DRB, DQA1, DQB, DPA and DPB) encode products that control immune responsiveness.

Thus, as disclosed in the Specification, the HLA loci used for tissue typing are divided into two main classes, with the subclasses designated as A, B, C, DRA, DRB, DQA, DQB, DPA and DPB. Applicant's representative is unaware of whether or not those were the only subclasses of HLA loci known at the time of filing, but agrees that the Specification provides a much larger teaching than asserted in the Office Action of May 13, 2004, which stated that "the specification provides primers for amplification of less than 20% of the [HLA] loci."

For background purposes only, attached hereto as Appendix A is a list of "Names for genes in the HLA region," dated 8/10/01. Related genes listed include HLA-DRB1, HLA-DRB2, HLA-DRB3, HLA-DRB4, HLA-DRB5, HLA-DRB6, HLA-DRB7, HLA-DRB8 and HLA-DRB9; HLA-DQA1 and HLA-DQA2; HLA-DQB1, HLA-DQB2 and HLA-DQB3; HLA-DPA1 and HLA-DPA2; HLA-DPB1 and HLA-DPB2. Applicant's representative respectfully

asserts that the Specification provided primers for a representative number of loci within the group of HLA loci.

Response to Office Action of March 31, 2004.

Submitted herewith is a Notice of Appeal. Applicant requests entry of the above-listed amendment to comply with requirements of form and to reduce the issues for consideration upon appeal.

The Action objected to claims 26, 27 and 28 as being dependent claims separated from the claim from which they depend by another independent claim. Claims 26-28 are canceled and the text of claims 27 and 28 has been incorporated into claims 3 and 15 respectively. The subject matter of claim 26 overlapped with that of pending claim 8.

Applicant respectfully traverses the Action's assertion that dependent claim 12 fails to further limit the subject matter of claim 1. As discussed below, claim 1 is amended herein to delete the words "genetic coding" from the term "HLA genetic coding locus". The amended claim now refers to "HLA locus". As noted by the Action, the Specification at page 11, lines 7-9 states that, "...an HLA locus is the region of the genomic DNA that includes the gene that encodes an HLA gene product." Therefore, an "HLA locus" includes both coding and non-coding regions. Claim 1 recites "amplifying human genomic DNA, wherein the amplified genomic DNA comprises a non-coding region sequence...". There is nothing in the amended claim 1 that requires that the amplified genomic DNA "comprises at least part of at least one exon" as recited in claim 12. Applicant therefore asserts that claim 12 further limits the subject matter of claim 1.

Claims 1, 13 and 19 are amended to recite the full name "human leukocyte antigen", for the abbreviation "HLA". Support for the amendment may be found in the Specification at least at page 2, lines 24-25. The amendment addresses Paragraph 27 of the Action, which asserts that claims 1, 13 and 19 are indefinite for failing to provide the full name for the term which is abbreviated as "HLA". The term "human" as a modifier of "HLA" is deleted as redundant.

Claims 1, 13 and 19 are amended to delete the words "genetic coding" from the phrase "HLA genetic coding locus". Support for the amendment may be found in the Specification at least at page 11, lines 7-9.

Claim 8 is amended to replace "the coding region" with "a coding region" of the locus. As the Action notes, there is no antecedent basis for "the coding region". Support for the amendment may be found in the Specification at least at page 74, lines 7-11 which recites that, "Furthermore, by analyzing haplotypes, the method can detect genetic diseases that are not associated with coding region variations but are found in regulatory or other untranslated regions of the genetic locus."

Applicant submits that the amendments to the claims are to comply with requirements of form and to put the claims in better form for consideration on appeal. Entry of the amendments is requested prior to submission of an Appeal Brief. The remaining substantive issues concerning patentability of the subject matter will be addressed in the Appeal Brief.

Respectfully submitted,

Date: June 30, 2004

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